IN THE CLAIMS:

1.-19. (Cancelled)

20. (Previously Amended) A method of controlling a vehicle having a first running mode wherein a driving shaft torque of the vehicle is controlled according to a first target value determined from an accelerator pedal position and a second running mode wherein the driving shaft torque of the vehicle is controlled according to a second target value determined from an environmental operating conditions ahead of said vehicle, comprising:

when said first running mode is changed to said second running mode, determining a changing-over time period from said first running mode to said second running mode based on a difference between said first target value calculated in said first running mode and said second target value calculated in said second running mode; and

setting a third target value which varies from said first target value to said second target value in said changing-over time period.

21. (Previously Amended) A method of controlling a vehicle according to claim 20, wherein the driving shaft torque of the first running mode is controlled to gradually approach said driving shaft torque of the second running mode by controlling an air/fuel ratio of an engine of said vehicle.

22. (Previously Amended) A method of controlling a vehicle having a first running mode wherein an engine torque of the vehicle is controlled according to a first target value determined from an accelerator pedal position

and a second running mode wherein the engine torque is controlled according to a second target value determined from an environmental operating conditions ahead of said vehicle, comprising:

when said first running mode is changed to said second running mode, determining a changing-over time period from said first running mode to said second running mode based on a difference between said first target value calculated in said first running mode and said second target value calculated in said second running mode; and

setting a third target value which varies from said first target value to said second target value in said changing-over time period.

23. (Previously Amended) A method of controlling a vehicle according to claim 22, wherein the target value is controlled to gradually approach said second target value by controlling an air/fuel ratio of the engine of said vehicle.

24.-25 (Cancelled)

26. (Previously Amended) A control apparatus for a vehicle having a first running mode wherein a driving shaft torque of the vehicle is controlled according to a driving shaft torque of the vehicle from an accelerator pedal position and a second running mode wherein the driving shaft torque of the vehicle is controlled according to the second target value determined from environmental operating conditions ahead of said vehicle, comprising:

when said first running mode is changed to said second running mode, determining a changing-over time period from said first running mode to said second running mode based on a difference between said first target value calculated in said first running mode and said second target value calculated in said second running mode; and

setting a third target value which varies from said first target value to said second target value in said changing-over time period.

27. (Previously Amended) A control apparatus for a vehicle according to claim 26, wherein the driving shaft torque is controlled to gradually approach the driving shaft torque of said second running mode by controlling an air/fuel ratio of an engine of said vehicle.

28. (Previously Amended) A control apparatus for a vehicle having a first running mode wherein an engine torque of the vehicle is controlled according to a first target value determined from an accelerator pedal position and a second running mode wherein the engine torque is controlled according to a second target value determined from at least one environmental operating condition ahead of said vehicle, comprising:

when said first running mode is changed to said second running mode, determining a changing-over time period from said first running mode to said second running mode based on a difference between said first target value calculated in said first running mode and said second target value calculated in said second running mode; and

setting a third target value which varies from said first target value to said second target value in said changing-over time period.

29. (Previously Amended) A control apparatus for a vehicle according to claim 28, wherein the target value is controlled to gradually approach said second target value by controlling an air/fuel ratio of an engine of said vehicle.

30. (Cancelled).

31. (Currently Amended) A method according to claim ~~30~~ 20, further comprising controlling the driving force according to said third target value until a difference between the second and third target values becomes a predetermined value.

32. (Currently Amended) A method according to claim ~~30~~ 20, wherein said vehicle further has a third running mode wherein the driving force is controlled according to said third target value until a difference between the second and third target values becomes a predetermined value.

33. (New) A method according to claim 22, further comprising controlling the driving force according to said third target value until a difference between the second and third target values becomes a predetermined value.

34. (New) A method according to claim 22, wherein said vehicle further has a third running mode wherein the driving force is controlled according to said third target value until a difference between the second and third target values becomes a predetermined value.

35. (New) A method according to claim 26, further comprising controlling the driving force according to said third target value until a difference between the second and third target values becomes a predetermined value.

36. (New) A method according to claim 26, wherein said vehicle further has a third running mode wherein the driving force is controlled according to said third target value until a difference between the second and third target values becomes a predetermined value.

37. (New) A method according to claim 28, further comprising controlling the driving force according to said third target value until a difference between the second and third target values becomes a predetermined value.

38. (New) A method according to claim 28, wherein said vehicle further has a third running mode wherein the driving force is controlled according to

said third target value until a difference between the second and third target values becomes a predetermined value.